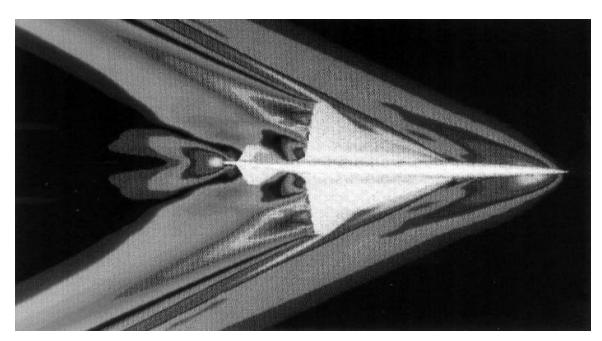
# **Technology Opportunity**

# High Speed Civil Transport

The National Aeronautics and Space Administration (NASA) seeks to transfer certin NASA-developed technologies to non-aerospace users. These technologies fall within the general areas of nondestructive evaluation techniques for materials, numerical flow codes, instrumentation, and noise and emissions measurement.

#### **Benefits**

- Cost-savings in many cases
- New measurement techniques which are more accurate
- Can detect smaller defects
- See individual technology write-ups for further benefits



## **Potential Commercial Uses**

- Power-generating facilities for measurement of emissions
- Research, design, and analysis of ground-based engines
- Remote sensing of molecular species for environmental concerns
- · Medical and pharmaceutical research

#### The Technology

A multibillion-dollar market will open up for supersonic airliners to handle enormous increases in long-range travel in the next century. The HSCT Program is a partnership of the U.S. aerospace industry and NASA to produce a flight vehicle that performs economically and conforms to international environmental standards. Cutting edge technologies are being developed to achieve these goals and many of them have the potential for application to many nonaerospace industries.

NASA's research for the HSCT focuses on reducing emissions effects on the atmosphere, and on airport noise and sonic boom. Specific technologies with dual use potential include various NDE techniques, fluid analysis codes, instrumentation, and measurement of emissions.

### **Options for Commercialization**

A few of the technologies are available for licensing, with patents held by NASA researchers. Most technologies are either not patentable or have no patents. Partnership with industry is sought to either apply the technologies to non-aerospace use or to further develop the technology.

#### Contact

Katherine K. Martin High Speed Research Propulsion Project Office Cleveland, OH 44135 E-Mail: katherine.martin@lerc.nasa.gov

#### **Key Words**

Noise reduction Emission control

